BRAC-133

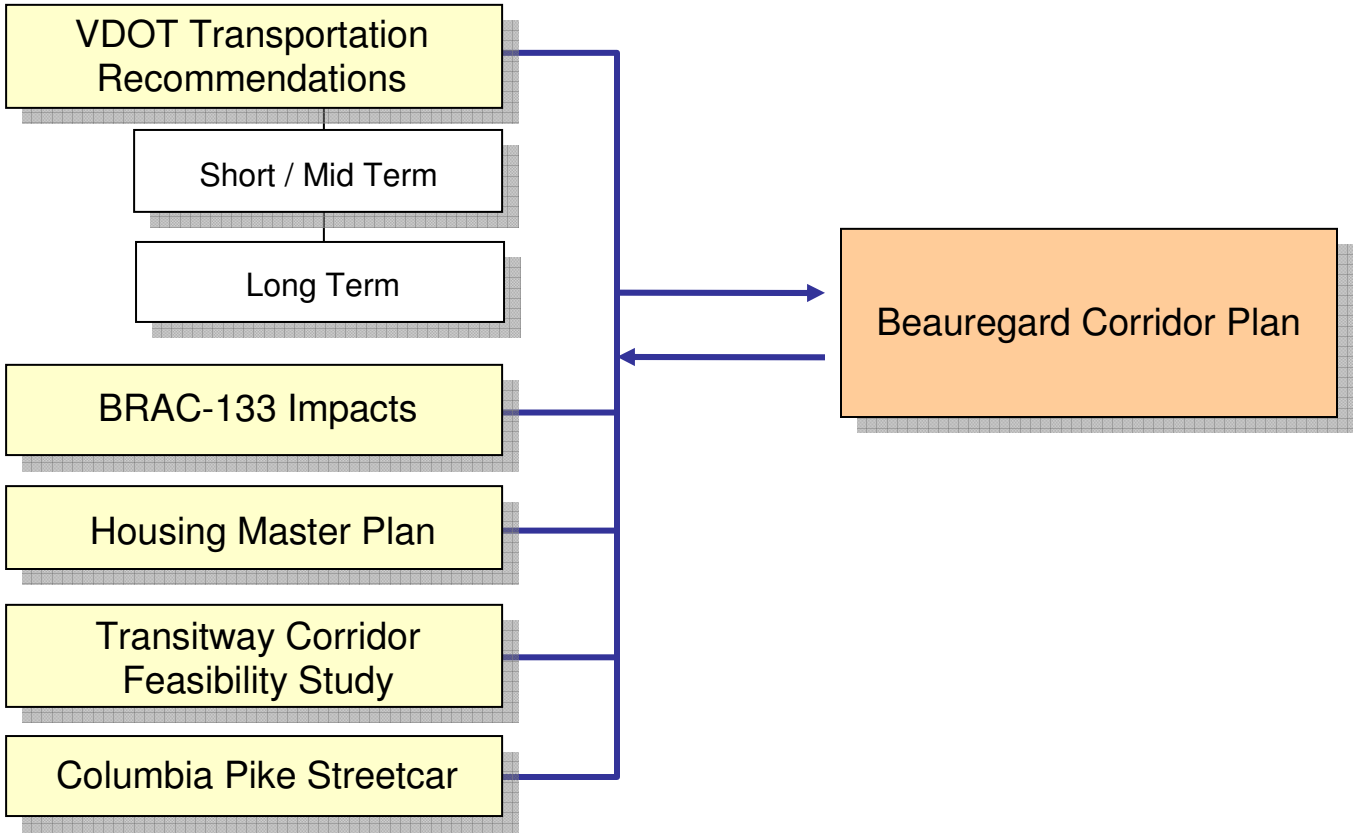
October 20, 2010

Transportation and Environmental Services

BRAC-133 Conceptual Design

- **Short-Term/Mid-Term Improvements Study underway**
  - **Consultant report to the BRAC Advisory Group on short-term/mid-term options**
- **Long Term Improvements Study**
  - **Scope amended to include modeling of both HOV and HOT lanes**

Beauregard Corridor Plan Coordination



UTILITIES OVERVIEW

BRAC 133

10/21/2010

BRAC 133 Utility Overview

- Utility services provided within development plans for the site
- All services coordinated through public utility companies
- Utilities companies provide the service within systems capacities and are responsible for systems reliability
- Permits & regulations govern the installation of all services to the site

Electric

- Dominion Virginia Power provides power to the site in accordance with state regulations
- Two Lines: Primary and Secondary
- Modifications/improvements made to existing primary lines
- Secondary line added to enhance reliability
- Back-up generation on site

Gas

- Washington Gas is providing gas service to the site
- Connections were coordinated with Washington Gas
- Connections made at existing lines serving the site
- Service engineered within planned demand

Water/Sewer

- Virginia American Water providing service
- Connections occurred at existing water mains previously located on site for development
- Project designed for 40% less water demand than typical (LEED Gold)
- Project contracted to discharge to Arlington treatment facility not Alexandria

Storm Water

- Winkler Preserve developed and built to receive post-development run-off from 225 acres
- BRAC 133's 16 acres,7% of total watershed, were developed within design capacity of the Winkler Preserve
- A management plan is in place for ongoing maintenance of the lakes and pond

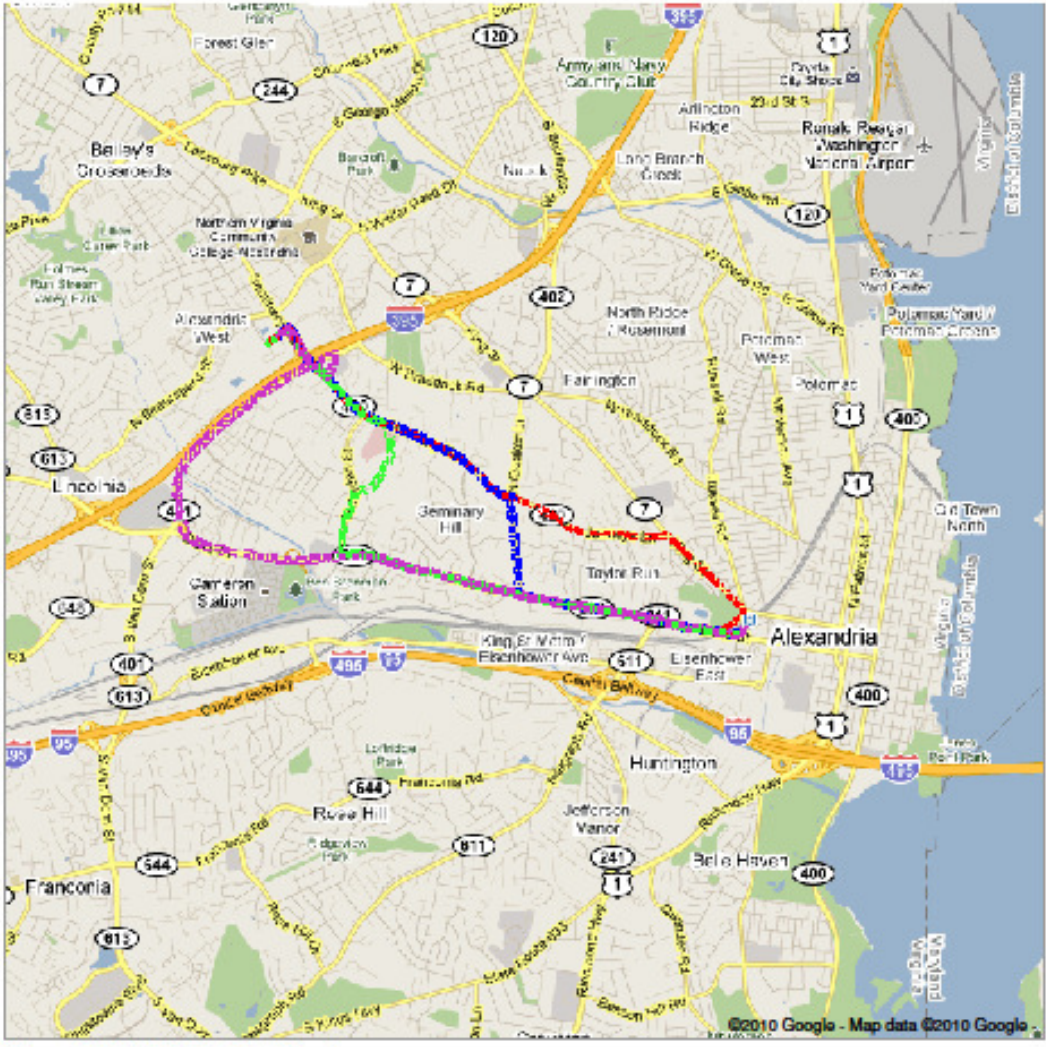
Preserve Protective Actions

- Surveyed ponds prior to beginning project
- Performed improvements and cleaned to linear lakes at project start
- Performing channel improvements in VDOT ROW
- Will conduct stream restoration from Hilton
- Installed erosion controls systems during project construction
- Conducting ongoing monitoring during project
- Ongoing coordination with Winkler Preserve

Sustainability & Energy Savings

- Green roof, stream restoration, channel improvements & bio-swales, to improve the site outfall to Winkler Preserve
- Installing drought tolerant native plants, low flow plumbing fixtures to achieve 40% reduction in water usage
- Installing LED lighting, Occupancy sensors, Demand Controlled Ventilation, Enthalpy Wheels, and Spray Foam Insulation to achieve 25% reduction in gas/electric use

King Street Transit Routes



10/21/2010

King Street Transit Route Runs

KING STREET TO MARK CENTER – 9/16/2010									
	Route #1	**Route #2**	**Route #3**	**Route #4**					
Length of Run	4.0 miles	4.1 miles	6.0 miles	4.7 miles					
Start Time	7:20AM	8:10AM	8:46AM	DNR		Originated at King Street			
Run Time	**16:15**	**14:43**	**18:42**						
Start Time	7:47AM	8:20AM	8:46AM	DNR		Return Trip			
Run Time	**21:04**	**18:55**	**21:41**						
Start Time	4:46PM	5:23PM	6:32PM	DNR		Originated at King Street			
Run Time	**20:23**	**29:36**	**21:55**						
Start Time	5:07PM	5:53PM	6:32PM	DNR		Return Trip			
Run Time	**14:41**	**16:33**	**23:13**						

King Street Transit Route Runs

KING STREET TO MARK CENTER – 9/20/2010									
	Route #1	**Route #2**	**Route #3**	**Route #4**					
Length of Run	4.0 miles	4.1 miles	6.0 miles	4.7 miles					
Start Time	8:56AM	8:25AM	7:35AM	7:03AM		Originated at King Street			
Run Time	**13:10**	**11:57**	**19:20**	**14:21**					
Start Time	9:10AM	8:37AM	7:56AM	7:18AM		Return Trip			
Run Time	**10:30**	**17:30**	**28:00**	**17:05**					
Start Time	6:28PM	5:53PM	5:07PM	4:32PM		Originated at King Street			
Run Time	**13:10**	**15:47**	**18:44**	**13:28**					
Start Time	6:42PM	6:10PM	5:26PM	4:46PM		Return Trip			
Run Time	**11:20**	**18:00**	**26:52**	**20:02**					

King Street Transit Route Runs

AVERAGE RUN TIMES - KING STREET TO MARK CENTER						
	Route #1	**Route #2**	**Route #3**	**Route #4**		
Length of Run	**4.0 miles**	**4.1 miles**	**6.0 miles**	**4.7 miles**		
Run Time	**14:42**	**13:20**	**19:01**	**14:21**		Average AM First Leg
Run Time	**15:47**	**18:22**	**25:12**	**17:05**		Average AM Return Trip
Run Time	**16:46**	**22:42**	**20:19**	**13:28**		Average PM First Leg
Run Time	**13:00**	**17:16**	**24:32**	**20:02**		Average PM Return Trip